

few



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/010,440      | 11/08/2001  | Kari Kirjavainen     | U 011573-2          | 8064             |

7590

04/23/2003

Ladas & Parry  
26 West 61st Street  
New York, NY 10023

EXAMINER

HOOK, JAMES F

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3752

124

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/010,440

Applicant(s)  
Kirjavainen et al.

Examiner  
James F. Hook

Art Unit  
3752



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 31, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, and 10 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 3752

### DETAILED ACTION

1. It should be noted that claim 8 fails to further limit the article as set forth already in claim 7 when both have the same limitations and are dependent upon the same claim. It is recommended that either one claim be canceled or one claim be made dependent upon a different claim. It should also be noted that there are no copies of the foreign references in the application. If applicant wishes the references to be considered additional copies should be sent.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claim 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishino. The patent to Nishino discloses the recited pipe comprising extruded layers including an inner layer 11 made of plastic adhesive, outside of which is an inner layer 12 made of a plastic that is electrically conductive and considered the equivalent of an electrode layer, outside of which is an insulating

Art Unit: 3752

layer 13 of plastic adhesive separating the inner electrode layer and an outer electrode layer 14 which can also be made of electrically conductive plastic.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Schmidt. The patent to Brown discloses an inner layer 12 of plastic, a layer formed of wires 14 are electrically conductive and considered the equivalent of an electrode layer, and an outer layer formed of a plastic 16 with a metal reinforcing layer provided therein which inherently would act as an insulator between the wire layers, where breaking of the wires in layer 14 produces a signal or alarm. The patent to Brown discloses all of the recited structure with the exception of forming at least some of the layers by extrusion and using the second conductive layer 16 in combination with the inner layer to detect breakage. The patent to Schmidt discloses an alarm system comprising an inner layer 2 made of a material, paper, an electrode layer 3 in the form of aluminum foil, a plastic insulation layer 4, an outer aluminum foil layer 5 that can also be considered an electrode layer, where the two foil layers are connected together in such a way as to sound a signal when the sleeve is broken or tampered with, where at least one layer forming the

Art Unit: 3752

sleeve is made by extrusion. It would have been obvious to one skilled in the art to modify the second metal wire layer in Brown to be an electrode type layer that in combination with the inner electrode layer would sound the alarm if the tube were damaged or tampered with which would provide for a more precise determination that the tube had been breached as suggested by Schmidt, and where it is obvious that plastic layers can be extruded and at least one layer of Brown could be extruded as suggested by Schmidt, as such would provide for a better pipe in that the layers could then cool while they are being attached together and eliminate production steps.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Schmidt as applied to claims 1 and 2 above, and further in view of Charboneau. The patent to Brown as modified discloses all of the recited structure with the exception of utilizing the electrode layer to detect strain to sound an alarm. The patent to Charboneau discloses the recited pipe comprising an inner layer 32 of plastic, electrodes 16, 38,46 which can sound an alarm if they are broken or can also detect strain and sound an alarm. It would have been obvious to one skilled in the art to modify the pipe in Brown as modified to use the electrode layer to detect strain to sound the alarm as suggested by Charboneau as such would sound an alarm before the electrode layer is broken.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Schmidt as applied to claims 1 and 2 above, and further in view of Swinbanks. The patent to Brown as modified discloses all of the recited structure with the exception of using the electrode

Art Unit: 3752

layer to create sound in the tube to cancel noise in the pipe. The patent to Swinbanks discloses the recited cancellation of sound waves in a pipe by generating a wave to cancel the noise sound waves using electrodes 1, 2, 6. It would have been obvious to one skilled in the art to modify the pipe in Brown as modified by providing structure to use the electrode layer to create a sound wave that will cancel out noise waves in the pipe as suggested by Swinbanks to make the pipe quieter.

8. Claims 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Thomas. The patent to Schmidt discloses all of the structure above with the exception of forming the insulating layer of a foamed material which inherently would have holes. The patent to Thomas discloses that it is old and well known to foam plastic materials in layers of a sleeve if certain properties are desired. It would have been obvious to one skilled in the art to modify the insulation layer in Schmidt to be made of any suitable plastic material including a foamed plastic as suggested by Thomas as such would provide the benefit of having some insulative properties for heat as well as for electricity.

### *Response to Arguments*

9. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3752

*Allowable Subject Matter*

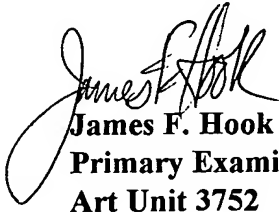
10. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Foster, Phelan, Kleven,, and Zimmer disclosing state of the art pipes.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Hook whose telephone number is (703) 308-2913.

J. Hook  
April 21, 2003

  
**James F. Hook**  
**Primary Examiner**  
**Art Unit 3752**